Application No.: 10/520,489 Amendment dated June 12, 2007

Reply to Office Action of February 12, 2007

AMENDMENTS TO THE SPECIFICATION:

Please amend the third paragraph, beginning at line 13, on page 4 of the specification as filed (paragraph [0016] of the specification as published), as follows:

The processing system as defined above comprises a computer incorporating means for recording and analysing data. Such means for real time digital sampling of images of the moving joints may be image processing software capable of manipulating sequential images, for example "ImagePro". IMAGE PRO® image processing software, As an alternative to sampling analogue output form images, the direct sampling of digital format images may also be preferred. Data obtained from the intensifier in a digital format can be accessed by DICOM. The means for recording time code and data from the passive motion platform may be a framegrabber card compatible with the computer image processing software and a time code generator connected to the computer peripherally (for example a FOR.A TGR2000). The images generated may be stored at high resolution on the hard drive of the computer or on a suitable data carrier, for example a compact disc.

Please amend the fourth paragraph, beginning at line 26, on page 4 of the specification as filed (paragraph [0017] of the specification as published), as follows:

The means for recognising templates attributed to individual bones and tracking these automatically using cross-correlation functions may be software for complex mathematical transformations, for example "Matlab"-THE MATHWORKS MATLAB® computing software.

Please amend the fifth paragraph, beginning at line 30, on page 4 of the specification, which continues on to page 5, as filed (paragraph [0018] of the specification as published), as follows:

The means for geometric transformation of the positional data to graphically display their relative motion over time may be a statistical spreadsheet software program such as Microsoft "Excel". MICROSOFT® EXCEL Spreadsheet. This may include averaging repeated trackings to optimise reliability.

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Please amend the second full paragraph on page 10, beginning at line 15, of the specification as filed (paragraph [0048] of the specification as published), as follows:

In instances, where there are metallic implants (29) present in the spine (for example as shown in FIG. 2(b)), there may be more than 4 points used to create a template.

Please amend the first paragraph on page 11, beginning at line 1, of the specification as filed (paragraph [0052] of the specification as published), as follows:

An apparatus for the measurement of skeletal joint motion in a subject in accordance with the present invention is described in FIGS. 1(a) and 1(b). An apparatus is shown which comprises a passive motion device (1) having a horizontal platform base (23) and a horizontal passive motion platform (25). The horizontal passive motion platform (25) is situated on the horizontal platform base (23). The horizontal passive motion platform (25) is composed of a horizontal static platform (7) which is rigidly connected to the upper lateral surface of the platform base and a horizontal laterally movable swing platform (5) which is flexibly connected to the static platform or to the upper surface of the platform base, in which the static platform is adjacent to the laterally movable platform which together both form the passive motion platform, in which the movement of the laterally movable platform is driven by a motor (9) attached to the platform base where movement of the laterally movable platform is achieved by means of a control arm (11, 13), composed of drive (13) and drive cylinder (11) that operably connects the laterally movable moveable platform to the motor. An imaging device (22, 21) is positioned around the device (1) such that movement of the skeletal joint in the subject can be imaged. The imaging device is suitably an X-ray tube (22) and an image intensifier (21). The device (1) has a protractor base (3) underneath the laterally movable swing platform (5) which is also provided with a runner (27). The device (1) also contains linkages to a patient control or panic button (15), radiographer control panel (17) which may be an X-ray console where the imaging device is an X-ray tube, and a computer and time code generator (19).

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Please amend the first paragraph on page 13, beginning at line 1, of the specification as filed (paragraph [0061] of the specification as published), as follows:

FIG. 2(a) shows the three linked components of the system, being the passive motion platform, the X-ray machine or other imaging device and the computer acquisition and analysis system. The swing table motor (9) is connected via swing table control linkage (35) to the computer (33), the time code generator (19), the patient (37), and the x-ray machine console (31). The x-ray machine console (31) displays the images (43). The x-ray machine control linkages (39) connect the x-ray tube (22), image intensifier (21) and x-ray machine console (31). The intensifier output linkages (41) connect the computer (33), the image intensifier (21) and the x-ray machine console (31).

Please amend the fourth paragraph on page 15, beginning at line 16, of the specification as filed (paragraph [0077] of the specification as published), as follows:

In instances, where there are metallic implants (29) (for example as shown in FIG. 2(b)), there may be more than 4 points used to create a template.